REMARKS

Claims 1-8, 10-16, 24-27, and 30-37 are pending in the application.

Claims 1-8, 10-16, 24-27, and 30-37 stand rejected under 35 U.S.C. 103(a).

Claims 1, 10, 24, 30, 31 and 35 have been amended.

Claim 38 has been added.

Rejection under 35 U.S.C. 103(a)

The pending claims stand rejected under 35 U.S.C. 103(a) as being unpatentable over "Kalkunte" (US 6,118,761) in view of "Lee" (US 2002/0048280). (Final Office Action, pp. 5-6.) Appellants traverse this rejection.

Claims 1-8, 10-16, 24-27, and 30-37

Referring to independent claim 1, the Final Office Action, dated April 18, 2007, states that, for a third non-zero rate occurring during a third time interval, a second non-zero rate occurring during a second time interval, and a first non-zero rate occurring during a first time interval, wherein the third time interval is subsequent to the second time interval which is subsequent to the first time interval, Kalkunte fails to "expressly disclose wherein the third non-zero rate is greater than the second non-zero rate, and wherein the second non-zero rate is greater than the first non-zero-rate." *See* Final Office Action, p. 6.

The Final Office Action argues that Lee discloses this limitation. (Final Office Action, p. 6.) *However, the Applicants show herein that the invention disclosed in Kalkunte would fail to function if the rates disclosed therein are constrained by this limitation or any other assigned ordering of the rates.* In fact, constraining the rates of

Kalkunte to successively increasing rates will cause the invention of Kalkunte to increase congestion at the output port of concern rather than reduce that congestion, contrary to the purpose of the invention of Kalkunte. These facts explain why Kalkunte fails to disclose an ordering of rates. Since each of the pending independent claims (claims 1, 10, 24, 29, 30, and 31) require such an ordering, each of the independent claims is, for at least this reason, patentably distinct over Kalkunte, in view of Lee *or any other reference*.

Kalkunte cannot be expected to function if the rates discussed therein are constrained by an assigned ordering because these rates are "based on the detected congestion condition and the corresponding traffic contribution by each network switch port to the congested network switch port." (Kalkunte 2:48-50.) Since the corresponding traffic contribution varies from port to port, as well as from time to time, and can increase or decrease in a variety of patterns, constraining the rates of traffic of the multiple port switch to be successively increasing rates or to conform to any ordering scheme effectively nullifies the method presented in Kalkunte.

To see this in a mathematically explicit manner, consider the discussion given in Kalkunte 5:55-6:25, where the method for calculating the rates of the invention disclosed in Kalkunte is presented. From the equations given on Kalkunte 6:12 and Kalkunte 6:22 we see that upon reaching the congestion condition for port 1 we have the following equation for r'_{21}:

$$r'_{21} = \frac{r_{21}}{r_{21}+r_{31}+r_{41}} R_O .$$

Note that r'_{21} will be the new rate of traffic from port 2 to port 1 after the node connected to port 2 is sent a rate frame commanding it to change to this rate, r_{21} is the current rate

of traffic from port 2 to port 1, r_{31} is the current rate of traffic from port 3 to port 1, r_{41} is the current rate of traffic from port 4 to port 1, and R_O is the output rate of congested port 1. (Kalkunte 5:55-6:25.) Note that this equation is merely exemplary and a similar equation will hold for each of the rates of traffic between each of the ports. (Kalkunte 6:8-10.) Note also that this equation is to be applied whenever the rate of traffic from port 2 to port 1 is to be modified, except when there is no more congestion and the rate is to be set to its maximum value, the wire rate. (See the equation for r'' given at Kalkunte 7:58 and see 52, 58 and 59 of FIG. 3.) Finally, note that the congestion condition for port 1 holds, as with any port, when the number of bytes stored in the buffer associated with that port exceeds the threshold T1 (Kalkunte 5:4-8.)

Now, given this scheme, it should be clear that the method of Kalkunte is not compatible with constraining the rates at subsequent periods of time to meet any kind of ordering. When a congestion condition applies, the above equation may result in *either a raising or a lowering* of the rate of traffic from port 2 to port 1. If R_O is less than $r_{21}+r_{31}+r_{41}$, then $r'_{21} < r_{21}$. This is normally the condition that would result in the congestion condition first being met. (Kalkunte 5:33.) If, however, R_O is greater than $r_{21}+r_{31}+r_{41}$, then $r'_{21} > r_{21}$. This condition can occur when, for example, the congestion condition has been entered, has not yet been overcome, and one of the other ports, port 4, for example, ceases sending data to port 1. Since application of the above equation and the invention of Kalkunte has ensured that $r_{21}+r_{31}+r_{41} = R_O$ (Kalkunte 6:25) for the time period just before port 4 ceases to send data to port 1, when port 4 ceases to send data R_O will be greater than $r_{21}+r_{31}+r_{41}$ since now $r_{41} = 0$, whereas it was previously nonzero. It

can also occur when R_O simply increases due to a lifting of downstream bottlenecks, for example. Likewise, R_O may simply decrease due to the imposition of further downstream bottlenecks, in which case R_O becomes less than $r_{21}+r_{31}+r_{41}$. Since any port can begin and end the sending of data to another port at any time, since R_O can increase or decrease at any time, since the congestion condition can be overcome at any time (resulting in the rate of traffic being set to the maximum wire rate), and since some of these changes will increase the rate of traffic from port 2 to port 1 while others will decrease that rate, it should be clear that the invention of Kalkunte will fail to operate successfully if it is *required* to operate under any constraint that requires the definite ordering of its successive rates.

Thus, since each of the independent claims 1, 10, 24, 30, and 31 require a definite ordering, of one kind or another, of successive rates, each of these independent claims is, for at least this reason, patentably distinct over Kalkunte, in view of Lee or any other reference.

Thus, for at least these reasons, Applicants assert that a prima facie case of obviousness has not been made against claims 1-8, 10-16, 24-27, and 30-37 (independent claims 1, 10, 24, 30, and 31 together with their respective pending dependent claims).

Independent Claims 30 and 31

Further, independent claims 30 and 31 incorporate the limitation "wherein the second non-zero rate is *less* than the first non-zero rate." Aside from constraining the invention of Kalkunte such that its method is effectively nullified, *this limitation has not been alleged by the Final Office Action to have been taught by Lee*. Thus, for this further

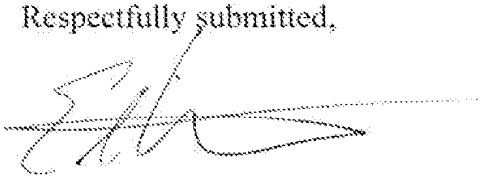
reason Applicants assert that a prima facie case of obviousness has not been made against claims 30 and 31 or their respective dependent claims.

CONCLUSION

In view of the amendments and remarks set forth herein, the application and the claims therein are believed to be in condition for allowance without any further examination and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is invited to telephone the undersigned at 512-439-5093.

If any extensions of time under 37 C.F.R. § 1.136(a) are required in order for this submission to be considered timely, Applicant hereby petitions for such extensions. Applicant also hereby authorizes that any fees due for such extensions or any other fee associated with this submission, as specified in 37 C.F.R. § 1.16 or § 1.17, be charged to Deposit Account 502306.

Respectfully submitted,



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